

# Knowledge, Attitude and Practice Towards Modern Family Planning Methods Among Mothers of Reproductive Age Group in Wonago Health Center, Southern Ethiopia

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## Abstract

**Back ground:** The continuing growth of the world population has become an urgent global problem. Ethiopia like most countries in Sub-Saharan Africa is experiencing rapid population growth. Currently, the country's population is growing at a rate of 3% is one of the largest rates in the world and if it continues unabated, the population will have doubled in 23 years, preventing any gain in the national development effort.

**Objectives:** The objective of this study was to determine the knowledge, attitude and practice of mothers towards family planning in Wonago health center.

**Methods:** cross-sectional study was conducted from April 15, 2004 E.C to June 10, 2004 E.C., in Wonago health center, Gedeo Zone, SNNPR, Ethiopia. A total of 251 study subjects were selected by systematic sampling technique from mothers of child bearing age (15-49) who attended Wonago health center for any services. Data was collected by using interviewees. Chi-square test and odds ratio were used to assess the presence and strength of association between independent and dependent variables.

**Result:** Out of total 251 women of reproductive age group who participated in the study 206(82.3%) had ever heard about FP, of which 202(98%) knew at least one method of FP and 116(59%) were using some method of FP at time of the study. The information about FP among reproductive age women of urban dwellers is thirteen times higher than rural dwellers OR=13.74(4.747,39.79) p-value 0.001, educational status showed statistically significant difference p-value 0.001 and women who possessed TV two times more likely had ever practiced FP methods than those who did not OR=2.599(1.441,4.6899), P-value 0.001.

**Conclusion and recommendation:** In the study the major source of information on FP is from the health institution, majority of the respondents knew at least one type of modern FP methods and socio demographic factors like residence educational status are associated with information about FP and ever practice of it. Community should be encouraged to use long term contraceptives so as to space their family and decrease the frequent visit to health institution.

**Keywords:** knowledge, attitude, practice, modern family planning

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## 1. Introduction

Family planning is a decision made by an individual or couple about how many children one would like to have when to start having children, when to stop having children and how long to rest between each pregnancy. The decision has to be made freely without any coercion, after the individual has been fully informed about the benefits of planning of family size, the methods one can use, the relative advantages of each of the methods as well as the expected side effects of all the methods described (2)

Ethiopia is considered to be one of most populous countries in Africa following Nigeria and Egypt. The growth rate, estimated at less than 0.5% in 1900, increased to 2% in the 1950s, to 2.5% during the late 1970s, and to 2.9 % in 1984. According to the first census, in 1900 the population of Ethiopia was estimated to be 11.0million and by 1994 it was about 53.5 million. Between 1999 and mid 2000, the population of Ethiopia was estimated to be 62 million with annual growth rate of 3% (3)

The continuing growth of the world population has become an urgent global problem. Ethiopia like most countries in Sub-Saharan Africa, is experiencing rapid population rate of 3% is one of the highest rates in the world and if it continuous unabated, the population will have doubled in 23 years, preventing any gain in the national development effort (7)

Access to family planning is an important challenge in Ethiopia. With better primary health care, childhood immunization, infant mortality is falling, so families increasingly want to limit the numbers of children they have. The shift to the smaller family size is highly the important driver of development, known as the, demographic transition. When a family two or more children, all of whom are likely to survive, they are able to invest in the children's nutrition, health and education, in a way that is impossible for most, families with nine or ten children. The desire to have smaller families is driven by a combination of rising income, improved life expectancy, lower infant mortality, better education and increased savings, as well as changing cultured and social norms. Today Ethiopia and Germany have roughly the same number of people (around 82 million. But unless something changes,

by 2050 Ethiopia is projected to more than double its population to 174 million, while over the same period Germany's population is likely to decline to 72 million. The cause is simple: Ethiopia's total fertility rate of 5.4 is four times greater than that of Germany's rate of 1.4 (20).

In 1971, the Ethiopian population was estimated at 25 million and the growth rate was at 2.5 percent. Although population problems are suspected to have contributed to the health based economic problems of the country in the recent years, no large scale have been conducted in this area and the government has not formulated an official police on family planning. During 1970-71, the first survey of knowledge, attitude and practice of family planning in Ethiopia was carried out under the sponsorship of the institute of Ethiopian studies of Haile sellase first University. This study was designed to provide a rudimentary data base for the national development and health planning (8) The study help to Identify the factors affecting KAP towards FP so as to inform health service managers to take measures. and Inform the better ways through which KAP towards FP will be improved. and this study serves as reference for those who will conduct same study in the area.

## 2. Subjects and Methods

### 2.1. Study area and period

This study was conducted in wonago Health center from April 15, 2004 E.C to June10, 2004 E.C. Wonago is a Capital of Wonago Woreda which is one of the six woredas in Gedeo Zone, SNNPR, Ethiopia. It shares boundaries with Tumata Chirata kebele in the north, Sugale kebele in the south and east, and Bale bukisa kebele in the west. The town lies in international asphalt road line that connects Addis Ababa with Nairobi, Kenya. It is found 375 km from Addis Ababa, 98 km from Hawassa, capital city of SNNPR and 12km from Dilla, capital of Gedeo Zone. It covers a total area of 68 hectares having a total population of 16,451 as the 2003 E.C report of Wonago municipality.

The study was conducted from April 15, 2004 E.C to June 10, 2004 E.C

### 2.2. Study design

Institution based cross-sectional study design was conducted

### 2.3 Study population

Selected women in reproductive age group (15-49) who attended wonago Health center for any services during data collection period.

### 2.3. Inclusion and Exclusion criteria

#### 2.4. Inclusion Criteria

Selected woman of reproductive age (15-49) who was not seriously ill, had no hearing and speaking problem and mentally healthy.

#### 2.5. Exclusion criteria

Selected woman who was seriously ill, had hearing and speaking problem and mental illness

### 2.6. Sample size and Sampling technique

Single population proportion formula was used to calculate sample size with confidence interval of 95% assuming 5% marginal error and  $\alpha = 5\%$ . Proportion of sample size determination was used from Ethiopia Demographic and health survey conducted in 2011 on KAP of the reproductive age women on family planning methods showed that about 97.2% women have heard of any family planning method, 19.6% used any of the method.

$$n = \frac{(Z_{\alpha/2})^2 (p) (1-p)}{w^2}$$

Where

n= sample size

z= confidence coefficient

w= marginal error

p= proportions

From the DHS, we had

Knowledge ( $p_1$ ) = 97.2%

Practice ( $p_2$ ) = 19.6 %

$$\text{So } n1 = \frac{(z_{\alpha/2})^2 (p_1) (1-p_1)}{w^2}$$

$$= \frac{(1.96)^2 (0.972) (1-0.972)}{(0.09)^2} = 41.82 \approx 42,$$

Considering 10% non- respondent rate it will be,  $42+42 \times 15\% = 46$   
 Since the source population was more than 10,000 which was 22,595 we didn't use correction formula

$$n_2 = \frac{(zx/2)^2 (p_2)(1- p_2)}{w_2}$$

$$= \frac{(1.96)^2 (0.196) (1-0.196)}{(0.05)^2} = 242.14 \approx 242$$

Where  $p_2 = 0.196$

Considering 10% non-respondent rate  $n_2$  will be  
 $242 + 242 \times 10\% = 242 + 24.2$   
 $= 242 + 24.2 \approx 266.2 \approx 266$

For the sake of generalizations we used the proportion with the largest sample size i.e. practice ( $p_2$ ) = 19.6%  
 $nf = 266$

Systematic sampling technique was used to select women of child bearing age who attended Wonago health center for any services.

The interval of the study population selected was calculated as follow:

$$K = \frac{N}{n} \quad \text{Where:}$$

$$= \frac{1500}{266} \quad K = \text{is number of interval between study subjects.}$$

$$= 5.6390 \approx 6 \quad n = \text{sample size (266)}$$

$N =$  Reproductive age group women who attended health center

To get the study subjects, source population was listed 1, 2, 3, -----, 1500. The first study subject was selected from first six source subjects by a lottery method which we found was second source subject. For the rest of the study subjects, every 6<sup>th</sup> source subject will be selected i.e. 2<sup>nd</sup>, 8<sup>th</sup>, 14<sup>th</sup>, 20<sup>th</sup>, -----.

## 2.7. Data collection procedures

The data collection tools were structured questioner which consists knowledge, attitude and practice questions on family planning. Data was collected regarding the dependent and independent variables by interview administered questionnaire

## 2.8. Data quality assurance

Trained data collector were undertake data collection .Before the actual data collection, the questionnaire was pre tested in 5 % of women in reproductive age group (15-49) in other health centers Based on the pretest, necessary modification were made on the questions and the data of the pretest was excluded in the actual data analysis

To keep the data as accurate as possible, the structured check list for data collection was used thoroughly throughout the process. Completeness of the data and possible errors was also be monitored carefully.

## 2.9. Data processing and analysis

After collection of data the responses were coded and entered using EPI info version 3.1 statistical programs. After data entry was finished, attentively checked for consistency of data entry. Data was cleaned accordingly and then exported to SPSS version 16.0 for further analysis. Then frequency distribution of dependent and independent variables was worked out. To establish association between dependent independent variables,  $X^2$  test and p-values were used. Statistical significance was considered at p-value less than 0.05.

## 2.10 Operational Definitions

**Attitude:** ones look towards FP.

**Current FP method user:-**woman using any one of the modern FP methods currently **Emergency contraceptive:** - a kind of contraceptive indicated after unprotected sexual inter course to prevent unintended pregnancy.

**Ever use of FP method:** use of any method of FP at least once during the sexual life.

**High income:** - monthly income of birr more than 500

**Illiterate:** - those respondents who did not go to school and could not read and write.

**Knowledge:** - awareness of the existence of family planning, its importance and effectiveness.

**Low income:** - monthly income of less than 500 birr.

**Modern FP methods:** - contraceptive methods which include OCPs, injectables, condoms, implants, IUCDs, diaphragm, vaginal foam, BTL.

**Practice:** - any previous history of family planning methods used.

**Sexually active:** - having a previous history of vaginally sexual intercourse.

**Unintended pregnancy:** - pregnancy which occurred without plan.

### 2.11 Ethical considerations

Ethical clearance was obtained from research and ethical committee (REC) of Rift Valley University, department of public health. The consent was obtained from Wonago health center and selected mothers were studied after purpose and procedure of the study were explained and verbal consent was obtained from all respondents and all data obtained from individual was kept confidentially by using codes instead of any personal identifier.

## 3. Results

Out of the calculated sample of 266 sample of reproductive age women 251 responded to the interview while 15 women refused to participate in the study. Analysis was based on the 251 questionnaires making the overall response rate of 94.3 %. Out of 251 respondents 129(51.4%) were rural dwellers and 122(48.6%) were urban dwellers. Gedeo 127(70.5%) and Amhara 41(16.3%) were the majority of ethnic groups and followed by others. Protestant were the majority of the religious group which comprises 172(68.5%) followed by orthodox 64(25.5%) followers and the rest comprises for minority. Majority of the respondents were married 219(87.3%) and 30(12%) were single and 2(0.7%) were divorced. The majority of the respondents were house wives 125(49.8%) followed by government employed 45(17.9%) and students 33(13.4%). The majority of the respondents were illiterates 109(43.4%) followed by primary school 77(30.7%).

Out of 251 respondents who were participated in the study 150 of them responded about their monthly income while the rest refused or did not want to estimate. Of those 81 respondents (54%) earned monthly income between 500-1000 ETB followed by 42 respondents (16.5%) earned less than 500 ETB per month. Out of 251 respondents 77(30.5%) owned TV, 155(61.8%) owned radio. The majority of the respondents 166(66.1%) had no cattle; the rest of the respondents had at least one cattle.

### Family Planning Knowledge of the respondents

Knowledge of modern FP was found to be universal; 206(82.5%) of respondents had ever heard about FP regardless of educational level and socio economic status. The source of information for the majority 145(70.4%) from the health institution, followed by mass media and friend which accounts for 50(24.3%) and 44(21.4%) respectively, the rest 28(13.6%) got from relative (see also figure 1). All except 4 respondents (1.94%) who did not know any FP of total 206 respondents who had information on FP the rest 202(98.06%) or 80.5% of all the respondents knew at least one method of FP. Out of 202 respondents majority 178 (86.4%) knew depo- provera, followed by 138(69%) knew pills, 82(39.8%) knew nor plant, and 81(39.3%) knew IUCD, 69(33.5%) knew condom and 97(47.1%) knew two and more FP methods.

Questions were also asked about importance of FP; 192(94.1%), 165 (80.9%) and 158 (77.5%) respondents selected that FP uses for child spacing, prevention of unwanted pregnancy and for limiting family size respectively; 34 respondents selected two or more importance.

### Attitudes Towards Family Planning of the Respondents

Attitude is the most difficult to measure as it is characterized in a very abstract way. To gauge the attitudes towards FP, it was noted in the study that for five questioners with three alternatives; agree, disagree and neutral were interviewed and their response was recorded in questioners accordingly.

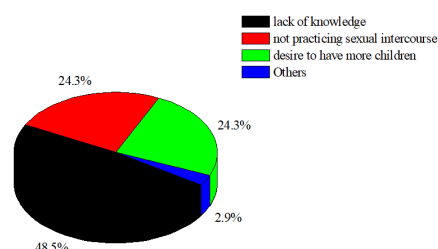
The result showed that 202(80.5%) respondents agreed on the fact that too large family size is harmful to overall well being of the family; out of 206 respondents who had information about FP 197(95.6%) and 7 respondents(3.4%) agreed and neutral respectively on question "FP improves ones standard of living." ; 201 women agreed on that discussion about FP is good; 172(83.9%) agreed on "FP helps mother to regain strength before her next pregnancy." ; 84(40.8%) disagreed and 79(38.3%) agreed on that "Couple who practice FP methods will have conflict in their marriage.

### Family Planning Practice of the Respondents

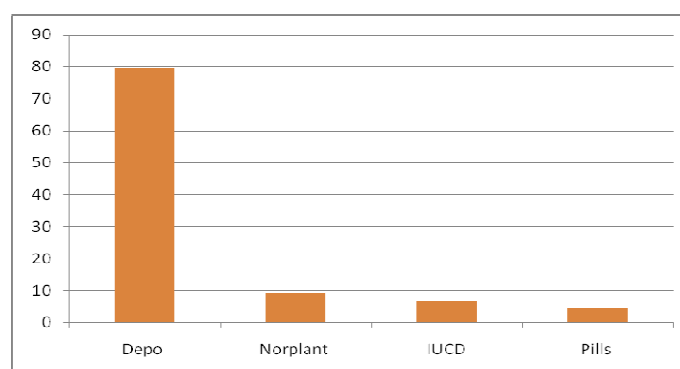
About 148(59%) of respondents had previously used some modern FP methods and 116(46.2%) of the respondents were using FP methods at the time of the study. Among 116 current users 93(79.5%) were Depo-Provera users, 11(9.4%) were Norplant users, 8(6.8%) were using IUCD, 4(4.3%) were using pills see also figure 2 Sixteen

(13.8%) of ever used FP methods changed to some form of FP methods at the time of the study for the following reasons; 13(81.2%) changed for the reason of side effects, 2(12.5%) and 1(6.5%) users changed for the reason to use for the long duration and inaccessibility of the desired FP method respectively.

Among 103(37.3%) of study subjects who had not ever used any FP method, they had different reasons for non use; lack of knowledge 48.5%; and not practicing of sexual intercourse and desire to have more children were share 24.3% both; and the rest 2.9% accounts for other reasons.



**Figure 1 Reason for non use of Family planning among women of reproductive age group in Wonago health center, SNNPR, June 2012**



**NB: percentages add up more than 100% because more than one answer was possible.**

**Figure 2. Percentages of different types of FP methods used at time of study among women of reproductive age group in Wonago health center, SNNPR, June 2012**

### Factors Associated with information on Family Planning

The information about FP among reproductive age women of urban dwellers is thirteen times higher than rural dwellers OR=13.74(4.747, 39.79) p-value 0.001. Educational status showed statistically significant difference, p-value 0.001. Analysis of the family size of the study population showed that the respondents who had more than six family members were 0.3 times likely had information on FP OR=0.321(0.108,0.949) p-value 0.033.

Reproductive age women who possessed TV 25 times more likely to get information about FP as compared with those who did not possess and those who possess radio six times more to be informed on FP OR=6.242(3.026,12.87) p-value 0.001.

Reproductive variables of women of reproductive age group by information about FP

Analysis of reproductive variable like need of additional children showed no statistically significant difference p-value= 0.093 (see table 1)

**Table 1. The association of selected socio demographic variables of the women of reproductive age by information about FP in Wonago health center, Southern Ethiopia, June 2012.**

| Variables                 | Information about FP |    | X <sup>2</sup> | OR (95% CI)           | P-value |
|---------------------------|----------------------|----|----------------|-----------------------|---------|
|                           | Yes                  | No |                |                       |         |
| <b>Residence</b>          |                      |    |                |                       |         |
| Urban                     | 118                  | 4  | 34.62          | 13.74(4.747,39.79)    | 0.001 * |
| Rural                     | 88                   | 41 |                |                       |         |
| Total                     | 206                  | 45 |                |                       |         |
| <b>Educational status</b> |                      |    |                |                       |         |
| Illiterate                | 71                   | 38 | 39.529         |                       | 0.001*  |
| Primary school            | 70                   | 7  |                |                       |         |
| Secondary school          | 31                   | 0  |                |                       |         |
| Tertiary school           | 34                   | 0  |                |                       |         |
| Total                     | 206                  | 45 |                |                       |         |
| <b>Family size</b>        |                      |    |                |                       |         |
| Six and less              | 135                  | 38 | 4.536          | 0.323(0.109,0.956)    | 0.033 * |
| More than six             | 44                   | 4  |                |                       |         |
| Total                     | 179                  | 42 |                |                       |         |
| <b>Television</b>         |                      |    |                |                       |         |
| Yes                       | 176                  | 1  | 20.876         | 25.723(3.474,190.490) | 0.001*  |
| No                        | 130                  | 44 |                |                       |         |
| Total                     | 206                  | 45 |                |                       |         |
| <b>Radio</b>              |                      |    |                |                       |         |
| Yes                       | 143                  | 12 | 28.578         | 6.242(3.026,12.87)    | 0.001*  |
| No                        | 63                   | 33 |                |                       |         |
| Total                     | 206                  | 45 |                |                       |         |

**NB:\*** indicate statistically significant when OR does not cross one.

#### **Factors Associated with ever practice of Family Planning methods**

Women of reproductive age group who dwelled in urban three more likely to practice FP methods as compared to rural dwellers, OR=3.2(1.866,5.429) and p-value 0.001. Educational status showed statistically significant difference and p-value 0.003, but family size showed no statistically significant difference

Women who possessed TV two times more likely ever had practiced FP methods than those who did not OR=2.599(1.441,4.6899) p-value 0.001 and those who owned radio four times more likely had ever practiced FP methods than those who did not OR=4.023(2.346,6.898), p-value 0.001

Reproductive variable like number of males the women possessed and need of additional children showed no statistically significant difference on ever practice of FP methods (see table 2).



**Table 2. The association of background variables of women of reproductive age group by ever practices of FP methods in Wonago health center, Southern Ethiopia, June, 2012**

| FP Methods in Wonago Health Center, Southern Ethiopia, June, 2012 |                           |     |                |                     |         |
|---|---------------------------|-----|----------------|---------------------|---------|
| Variable  | Ever Practiced FP Methods |     | X <sup>2</sup> | OR (95% CI)         | P-value |
|   | Yes                       | No  |                |                     |         |
| <b>Residence</b>  |                           |     |                |                     |         |
| Urban   | 89                        | 33  | 19.92          | 3.2(1.866,5.429)    | 0.001*  |
| Rural   | 59                        | 70  |                |                     |         |
| Total   | 148                       | 103 |                |                     |         |
| <b>Educational status</b>   |                           |     |                |                     |         |
| Illiterate  | 51                        | 58  | 14.093         |                     | 0.003*  |
| Primary   | 53                        | 24  |                |                     |         |
| Secondary   | 18                        | 13  |                |                     |         |
| Tertiary  | 26                        | 8   |                |                     |         |
| Total   | 148                       | 103 |                |                     |         |
| <b>Family size</b>  |                           |     |                |                     |         |
| Six and less  | 109                       | 64  | 1.626          | 0.633(0.312,1.283)  | 0.202   |
| More than six   | 35                        | 13  |                |                     |         |
| Total   | 144                       | 77  |                |                     |         |
| <b>Television</b>   |                           |     |                |                     |         |
| Yes   | 57                        | 20  | 10.414         | 2.599(1.441,4.6899) | 0.001*  |
| No  | 91                        | 83  |                |                     |         |
| Total   | 148                       | 103 |                |                     |         |
| <b>Radio</b>  |                           |     |                |                     |         |
| Yes   | 111                       | 44  | 26.797         | 4.023(2.346,6.898)  | 0.001*  |
| No  | 37                        | 59  |                |                     |         |
| Total   | 148                       | 103 |                |                     |         |

NB. \* indicates statistically significant when OR does not cross one.

#### 4. Discussion and Conclusion

A total of 251 subjects participated in this study making response rate of 94.3%. The result of our study showed that 82.4% of which urban residents are more likely to be informed on family planning than rural dwellers (96.7%Vs 68.2%); this result showed that urban dwellers have similar but that of the rural one is less when compared with Similar cross sectional study conducted on modern contraceptive and knowledge attitude and practice study among women of reproductive age in Bahir Dar town and per urban area showed that 98% of women in urban and 96% in per urban area had heard of modern contraceptives (14).

In this study, 80.5% of respondents can spontaneously name at least one type of family planning method. Similar cross sectional study conducted to assess the knowledge attitude and practice of the mothers towards the family planning in regions of Amhara, Oromiya, SNNPR and Tigray regions of the Ethiopia to assess the knowledge attitude and practice of women's towards the family planning showed that 84.0% of women in SNNPR reported that they had heard of family planning method(12).

In our study socio demographic variables like occupation, religion and ethnicity did not show significant association with ever practice of FP which is similar with the study conducted in Bahir Dar town revealed that characteristics like occupation, religion and ethnicity did not show a significant association with preference of pill, injectables and Norplant (22) .

The result of our study showed that education has a positive influence in family planning information which was 65% among illiterates versus 90.9% among those educated up to primary, and those of secondary and tertiary share 100%. Those women who had at least primary education had good propensity to modern family planning methods than illiterates. It seems that once a woman enters the school system, her attitude towards family planning changes. Additionally, greater awareness on alternative life styles could be achieved through education (23). Also a cross sectional survey conducted to assess women's role in family planning in Jimma town showed that the more educated the women is the more likely she is to have the final say on family planning (13).

The source of information for the majority 145(70.4%) were from the health institution, followed by mass media and friend accounts for 50(24.3%) and 44(21.4%) respectively. This result is somewhat higher when compared with cross sectional study conducted in Bahir Dar and per-urban area revealed which showed that frequently mentioned sources of information were mass media (69.8%) followed health institution and friends which were 66% and14.4% respectively(22)

In our study 59%of respondents had used some modern Family Planning methods and 46.2% of the respondents were using FP methods at the time of the study, ever use of FP among urban dwellers 73% and 45.7% among rural dwellers; this result showed similar cross sectional study conducted in Bahir Dar town and per urban

to assess knowledge attitude and practice of Family Planning which was 19.5%Vs14.5%(factors..). Among ever users 13.8% switched to other method while 21.6% stopped to use and 65.5% continued to use this result showed the comparable with across sectional study on quality of Family Planning services and perception of clients in Sodo town, Southern Ethiopia, which showed that about 75% of women had used Family Planning method in the past, of which ever used, 41.6% stopped to use, 8.4% switched to other methods and 49.6% continued use of the method at time of survey (13)

Our result showed that socio demographic variables like educational status has positive effect on practice of family planning methods which were 46% among illiterate Vs52.9% among those attained at least primary school. Similarly a survey conducted in Jimma town showed the fact that the more educated the women is the more likely she is to have the final say on family planning (13).

Our study showed that In our study 173(78.3%) respondents had six and less family members 48(21.7%) respondents had more than six family members. This result is similar with survey of Guttmacher institute of Ethiopia which showed that the average family size is slowly declining from 6.4 children per woman in 1990, to 5.9 in 2000, to 5.4 in 2005.

Our result showed that the mean age at marriage in generally was found to be 18 years and for that of urban dwellers was 21 years while for rural was 17 years. But across sectional study conducted in Hawassa town, SNNPR to assess magnitude and determinants of un met need for family planning showed that the mean age at marriage in urban and rural were found to be 18 and 16 years respectively(16).

This study conducted among child bearing age of women of Wonago health center, Gedeo zone, Southern, Ethiopia to assess knowledge attitude and practice towards modern family planning methods is concluded as:

- Socio demographic factors like residence and educational status are associated with information about family planning and ever practice of it.
- Majority of the respondents knew at least one type of modern family planning methods.
- The major source of information on family planning is from health institutions.
- Educational status at primary school and above is positively associated with information on family planning and ever use of it.
- Most of the respondents were found to have favorable attitude towards modern family planning methods.
- More than half of the respondents had ever practiced some modern FP methods.
- The mean age at marriage of the urban dwellers is higher than that of the rural.
- Inject able FP method was the most commonly preferred method followed by or plant.

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